5

ABSTRACT OF THE DISCLOSURE

A comb-finger microstructure is disclosed for use in optical switching arrays, beam steering, optical displays, disk drive head actuators and the like. The microstructure is capable of producing linear or nonlinear actuation forces, perpendicular to the surface of a chip in which the microactuator is formed, as a function of applied voltages. The microstructure further provides the ability to detect the position of a movable structure with respect to a stationary or anchored structure.